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FILE 'HOME' ENTERED AT 10:58:46 ON 07 OCT 2004

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COST IN U.S. DOLLARS
SINCE FILE
ENTRY

ENTRY SESSION 0.21 0.21

TOTAL

FILE 'CAPLUS' ENTERED AT 10:59:29 ON 07 OCT 2004

FULL ESTIMATED COST

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FILE COVERS 1907 - 7 Oct 2004 VOL 141 ISS 15 FILE LAST UPDATED: 6 Oct 2004 (20041006/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s martin g/au
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L5
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587 COMPN/TI

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L6_
=> d L6 1-5 ibib, abs
        ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
L6
ACCESSION NUMBER:
                                      2004:220245 CAPLUS
DOCUMENT NUMBER:
                                      140:259173
                                      Compositions comprising bone marrow cells,
TITLE:
                                      demineralized bone matrix
                                      and RTG polymers for the induction of bone and
                                      cartilage formation
                                      Slavin, Shimon; Gurevitch, Olga; Kurkalli, Basan Gowda
 INVENTOR (S):
                                      S.; Cohn, Daniel; Sosnik, Alejandro
                                      Yissum Research Development Company of the Hebrew
PATENT ASSIGNEE(S):
                                      University of Jerusalem, Israel; Hadasit Medical
                                      Research Services & Development Ltd.
                                      PCT Int. Appl., 77 pp.
SOURCE:
                                      CODEN: PIXXD2
                                      Patent
DOCUMENT TYPE:
                                      English
LANGUAGE:
 FAMILY ACC. NUM. COUNT:
 PATENT INFORMATION:
        PATENT NO.
                                      KIND
                                                 DATE
                                                                  APPLICATION NO.
                                      A1 20040318
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        WO 2004022120
                                                                WO 2002-IL736
                                                                                                    20020904
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                    GW, ML, MR, NE, SN, TD, TG
                                                                   WO 2002-IL736
                                                                                                 A 20020904
 PRIORITY APPLN. INFO.:
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((COMPN OR COMPNS)/TI)

691265 COMPOSIT?/TI

A composition comprising bone marrow cells (BMC) and demineralized bone matrix AB (DBM) or demineralized tooth matrix (DTM), together with a reverse thermogelating polymer (RTG), e.g., Pluronic, poly(ether-ester), or poly(ether-carbonate). The composition optionally further comprises bone morphogenetic protein/s (BMP) and/or other active agents, particularly for use in the transplantation of mesenchymal progenitor cells into a joint or a cranio-facial-maxillary bone, alveolar bone of maxilla and mandibula, spine, pelvis or long bones, or for construction or reconstruction of any extra-skeletal bone, including for mech. or biol. support of artificial implants to the joint or of the joint or to the bone, for restoring and/or enhancing the formation of a new hyaline cartilage and subchondral bone The BMC-DBM-RTG composition of the invention may be used for the structure. treatment of hereditary or acquired bone disorders, hereditary or acquired cartilage disorders, primary or secondary malignant bone or cartilage disorders, metabolic bone diseases, or lesions caused by trauma, infection, any inflammatory process due to unknown or autoimmune etiol., conditions involving bone or cartilage deformities and Paget's disease. The composition may further be used for the correction of complex fractures, bone replacement and formation of new bone in plastic or sexual surgery, for support of implants of joints, cranio-facial-maxillary bones, or other musculoskeletal implants, including any artificial or musculoskeletal The composition may further be used for treating damaged joints or degenerative arthropathy associated with malformation and/or dysfunction of cartilage, subchondral, and/or any other part of the bone. A kit is provided for performing transplantation of the composition into a joint, maxillary or mandibular alveolar bone or any bony structure of a mammal, including support of artificial implants.

REFERENCE COUNT: THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS 5 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:695826 CAPLUS

DOCUMENT NUMBER:

137:222117

TITLE:

Compositions comprising bone marrow cells

together with demineralized and/or mineralized bone matrix for the

induction of bone and cartilage formation

Slavin, Shimon; Gurevitch, Olga; Kurkalli, Basan Gowda INVENTOR(S):

S.; Prigozhina, Tatyana

PATENT ASSIGNEE(S): Hadasit Medical Research Services and Development Ltd., Israel

Patent

SOURCE: PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	PATENT NO.				KIND DAT		DATE		APPLICATION NO.				DATE				
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WO	2002	0700	23		A2 20020912		1	WO 2	002-	IL17:	2		20020305				
WO	2002	0700	23		A3		2004	0219									
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ΕP	EP 1411994 A2 20040			0428	B EP 2002-701530						20	0020	305				
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		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						

US 2004170610 A1 20040902 US 2004-471031 20040419
PRIORITY APPLN. INFO.: IL 2001-141813 A 20010305
WO 2002-IL172 W 20020305

A composition comprises bone marrow cells (BMC) and demineralized bone matrix AB (DBM) and/or mineralized bone matrix (MBM) and optionally comprising bone morphogenetic protein/s (BMP) and/or other active agents, particularly for use in the transplantation of mesenchymal progenitor cells into a joint and/or a cranio-facial-maxillary bone, for restoring and/or enhancing the formation of a new hyaline cartilage and subchondral bone structure. The composition of the invention and method of treatment employing the same may be used for the treatment of hereditary or acquired bone disorders, hereditary or acquired cartilage disorders, malignant bone or cartilage disorders, metabolic bone diseases, bone infections, conditions involving bone or cartilage deformities and Paget's disease. The composition and method may further be used for the correction of complex fractures, bone replacement and formation of new bone in plastic or sexual surgery, for support of implants of joints, cranio-facial-maxillary bones, or other musculoskeletal implants, including artificial implants. The method of the invention may further be used for treating damaged joints or degenerative arthropathy associated with malformation and/or dysfunction of cartilage and/or subchondral bone. A kit is provided for performing transplantation into a joint or a cranio-facial-maxillary bone of a mammal of the composition of the invention.

L6 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:695798 CAPLUS

DOCUMENT NUMBER:

137:237783

TITLE:

Compositions comprising bone marrow cells

together with demineralized and/or mineralized bone matrix for bone

marrow transplantation

INVENTOR (S):

Slavin, Shimon; Gurevitch, Olga; Kurkalli, Basan Gowda

S.; Prigozhina, Tatyana

PATENT ASSIGNEE(S):

Hadasit Medical Research Services and Development

Ltd., Israel

SOURCE:

PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

г: 2

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	PATENT NO.							APPLICATION NO.				DATE					
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WO	2002	0699	88		A2		2002	0912	1	WO 2	002-1	IL17	1		2(0020	305
WO	2002	0699	88		A3		2004	0226									
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							IN,										
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							SE,										
		UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	Rυ,
		ТJ,	TM														
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	2004																
US	2004	1568	34		A1		2004	0812		US 2	004-	4710	48			0040	
PRIORITY	PRIORITY APPLN. INFO.:									IL 2	001-	1418	13	1	A 2	0010	305
									1	WO 2	002-	IL17	1	1	W 2	0020	305

AB A composition comprising bone marrow cells (BMC) and demineralized bone matrix (DBM) and/or mineralized bone matrix (MBM), optionally comprising bone

morphogenetic protein (BMP), particularly for use in bone marrow transplantation, into bone marrow cavity or into extraskeletal sites, and methods of transplantation/implantation thereof. The composition and methods of the invention enable restoring and/or enhancing the formation of hematopoietic microenvironment originating from the transplanted BMC, and are useful in the treatment of hematopoietic disorders, such as deficiency of stem cells and/or their products, genetic conditions resulting in abnormal stem cells and/or products, or hematopoietic disorders of malignant or non-malignant origin. The composition and method of the invention may also be used for the induction of graft tolerance, for the prevention of graft-v.-host disease. It is mostly important that the compns. and methods of the invention may be applied for the treatment of diseases affecting primarily or secondarily the stromal microenvironment that supports and regulates hematopoiesis. Further provided is a kit for transplantation into a mammal of BMC in admixt. with DBM and/or MBM.

ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN L6

1995:965987 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 124:26528

Demineralized bone matrix TITLE:

as a template for mineral-organic composites

Walsh, W. R.; Christiansen, D. L. AUTHOR(S):

Dep. of Orthopaedics, Brown Univ. Sch. of Medicine, CORPORATE SOURCE:

Providence, RI, USA

Biomaterials (1995), 16(18), 1363-71 SOURCE:

CODEN: BIMADU; ISSN: 0142-9612

PUBLISHER: Elsevier DOCUMENT TYPE: Journal English LANGUAGE:

Mineralizing biol. tissues are complex bioceramic-biopolymer composites AB engineered for a variety of functions. The organic and inorg. constituents, morphol., location, orientation, crystallinity and interactions exhibit materials of extremely fine microstructure, unique mech. and phys. properties with high strength and fracture toughness compared to the individual constituents. An understanding of mineralization, ultrastructural organization and interfacial bonding forces in mineralizing biol. composite tissues, such as bone, may provide new strategies and techniques for the production of a novel class of man-made organic-ceramic composites. The present study explores the use of the organic matrix remaining after removal of the mineral phase by chelation with EDTA or solubilizing in HCl as a template for mineral deposition and the production of mineral-organic composites. Different pH conditions are employed to alter the inorg. phase which is deposited within the organic matrix. Mech. testing and ultrastructural evaluations are carried out for characterization.

ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

1994:226978 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 120:226978

Composition and methods for the generation TITLE:

of bone using demineralized bone

matrix and transforming growth factor-β

Bruce, A. Gregory; Strong, D. Michael; Kibblewhite, INVENTOR (S):

Douglas J.; Gombotz, Wayne R.; Larrabee, Wayne F.;

Purchio, Anthony F.

PATENT ASSIGNEE(S): Bristol-Myers Squibb Co., USA

Eur. Pat. Appl., 19 pp. SOURCE:

CODEN: EPXXDW

Patent DOCUMENT TYPE: English

LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 585168	A2	19940302	EP 1993-402073	19930818

EP 585168 A3 19940817 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE AA 19940222 CA 1993-2103943 CA 2103943 19930812 19940222 NO 1993-2912 19930817 NO 9302912 Α AU 9344680 **A1** 19940224 AU 1993-44680 19930818 JP 06157339 A2 19940603 JP 1993-207328 PRIORITY APPLN. INFO.: US 1992-933290 Compns. and methods utilizing TGF- β and demineralized bone matrix (DBM) are described that are capable of inducing the formation of useful, nonresorptive bone. Bone formation is stimulated by the synergistic activity of a TGF- β mol., such as TGF- β 1 or TGF- 5β , with a HCl-treated DBM. Normal, hard nonresorptive bone development is stimulated and can be utilized in the treatment of fractures, skeletal defects, surgical repairs and skeletal reconstructions, such as in maxillofacial reconstructions. Implants were prepared from HCl-treated DBM and TGF- β 1 and placed in rabbits. TGF- 1β , at 100 and 250 μg/g DBM, significantly enhanced bone formation.

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L6 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2004:220245 CAPLUS

DOCUMENT NUMBER: 140:259173

ENTRY DATE: Entered STN: 19 Mar 2004

TITLE: Compositions comprising bone marrow cells,

demineralized bone matrix

and RTG polymers for the induction of bone and

cartilage formation

INVENTOR(S): Slavin, Shimon; Gurevitch, Olga; Kurkalli, Basan Gowda

S.; Cohn, Daniel; Sosnik, Alejandro

PATENT ASSIGNEE(S): Yissum Research Development Company of the Hebrew

University of Jerusalem, Israel; Hadasit Medical

Research Services & Development Ltd.

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

INT. PATENT CLASSIF.:

MAIN: A61L027-38

SECONDARY: A61L027-26; A61K035-32; A61K035-28

CLASSIFICATION: 63-7 (Pharmaceuticals)

Section cross-reference(s): 35

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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WO					A1 20040318			WO 2002-IL736				20020904					
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WO	2004	0221	21		A1		2004	0318	1	WO 2	003-	IL72	8		2	0030	904
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KG, KZ, MD, RU

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,

GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: WO 2002-IL736 A 20020904

PATENT CLASSIFICATION CODES:

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 2004022120 ICM A61L027-38

ICS A61L027-26; A61K035-32; A61K035-28

ABSTRACT:

A composition comprising bone marrow cells (BMC) and demineralized bone matrix (DBM) or demineralized tooth matrix (DTM), together with a reverse thermogelating polymer (RTG), e.g., Pluronic, poly(ether-ester), or poly(ether-carbonate). The composition optionally further comprises bone morphogenetic protein/s (BMP) and/or other active agents, particularly for use in the transplantation of mesenchymal progenitor cells into a joint or a cranio-facial-maxillary bone, alveolar bone of maxilla and mandibula, spine, pelvis or long bones, or for construction or reconstruction of any extra-skeletal bone, including for mech. or biol. support of artificial implants to the joint or of the joint or to the bone, for restoring and/or enhancing the formation of a new hyaline cartilage and subchondral bone structure. The BMC-DBM-RTG composition of the invention may be used for the treatment of hereditary or acquired bone disorders, hereditary or acquired cartilage disorders, primary or secondary malignant bone or cartilage disorders, metabolic bone diseases, or lesions caused by trauma, infection, any inflammatory process due to unknown or autoimmune etiol., conditions involving bone or cartilage deformities and Paget's disease. The composition may further be used for the correction of complex fractures, bone replacement and formation of new bone in plastic or sexual surgery, for support of implants of joints, cranio-facial-maxillary bones, or other musculoskeletal implants, including any artificial or musculoskeletal implants. The composition may further be used for treating damaged joints or degenerative arthropathy associated with malformation and/or dysfunction of cartilage, subchondral, and/or any other part of the bone. A kit is provided for performing transplantation of the composition into a joint, maxillary or mandibular alveolar bone or any bony structure of a mammal, including support of artificial implants.

SUPPL. TERM: bone marrow transplant reverse thermogelating polymer

implant; demineralized bone matrix transplant polymer

cartilage formation

INDEX TERM: Bone morphogenetic proteins

ROLE: THU (Therapeutic use); BIOL (Biological study); USES

(Uses)

(5; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for

induction of bone and cartilage formation)

INDEX TERM: Bone, disease

(Paget's, treatment of; compns. comprising bone marrow

cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and

cartilage formation)

INDEX TERM: Transplant and Transplantation

(allotransplant, bone; compns. comprising bone marrow

cells, demineralized bone matrix and reverse

thermogelating polymers for induction of bone and

cartilage formation)

INDEX TERM: Jaw

(alveolar bone; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM: Bone

(artificial; compns. comprising bone marrow cells,

demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM:

Multiple myeloma

(bone lesions related to; compns. comprising bone marrow

cells, demineralized bone matrix and reverse

thermogelating polymers for induction of bone and

cartilage formation)

INDEX TERM:

Transplant and Transplantation

(bone marrow; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM:

Anti-inflammatory agents

Antibiotics
Bone formation
Cartilage formation

Human

Immunomodulators
Immunosuppressants

Skull

Spinal column Vertebrata

(compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM:

Bone

(cortical, demineralized; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM:

Bone, disease

(defect, due bone metastasis; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM:

Particles

(demineralized bone matrix; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM:

Bone

Tooth

(demineralized matrix; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM:

Joint, anatomical

(disease, treatment of; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM:

Prosthetic materials and Prosthetics

(implants; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM:

Bone, disease

(infection, treatment of; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM:

Jaw

(mandibula; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

INDEX TERM:

Jaw

(maxilla; compns. comprising bone marrow cells,

demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation) INDEX TERM: Bone, neoplasm (metastasis, bone defects related to; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation) INDEX TERM: Hematopoietic precursor cell (neoplasm, bone lesions related to; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation) Bone, disease INDEX TERM: (osteopenia, treatment of; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation) Body, anatomical INDEX TERM: (pelvis; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation) INDEX TERM: Polyethers, biological studies ROLE: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (polycarbonate-; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation) INDEX TERM: Polyethers, biological studies ROLE: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (polyester-; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation) INDEX TERM: Polycarbonates, biological studies Polyesters, biological studies ROLE: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (polyether-; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation) Polymers, biological studies INDEX TERM: ROLE: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (reverse thermogelating; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation) INDEX TERM: Mesenchyme (stem cells, transplantation of; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation) INDEX TERM: Bone marrow (transplant; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation) INDEX TERM: Bone, disease Bone, neoplasm Cartilage, disease Cartilage, neoplasm (treatment of; compns. comprising bone marrow cells, demineralized bone matrix and reverse thermogelating polymers for induction of bone and cartilage formation)

75-44-5P, Phosgene

32200-04-7P ROLE: RCT (Reactant); SPN (Synthetic preparation); PREP

INDEX TERM:

```
(compns. comprising bone marrow cells, demineralized bone
                          matrix and reverse thermogelating polymers for induction
                          of bone and cartilage formation)
INDEX TERM:
                      500581-20-4P
                                        671240-77-0P
                      ROLE: SPN (Synthetic preparation); THU (Therapeutic use);
                      BIOL (Biological study); PREP (Preparation); USES (Uses)
                          (compns. comprising bone marrow cells, demineralized bone
                          matrix and reverse thermogelating polymers for induction
                          of bone and cartilage formation)
                      106392-12-5, Pluronic F127
INDEX TERM:
                      ROLE: THU (Therapeutic use); BIOL (Biological study); USES
                          (compns. comprising bone marrow cells, demineralized bone
                          matrix and reverse thermogelating polymers for induction
                          of bone and cartilage formation)
                             THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                             RECORD.
                      (1) Fowler, E; JOURNAL OF PERIODONTOLOGY 2002, V73(2), P191
REFERENCE(S):
                                  CAPLUS
                      (2) Gensci Regeneration Lab Inc; WO 9911298 A 1999 CAPLUS
                      (3) Hoechst Marion Roussel Ltd; EP 0884052 A 1998 CAPLUS
                      (4) Lindholm, T; CLINICAL ORTHOPAEDICS AND RELATED RESEARCH
                                  1982, 171, P251 MEDLINE
                      (5) Prewett, A; US 5314476 A 1994
     ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
1.6
ACCESSION NUMBER:
                             2002:695826 CAPLUS
DOCUMENT NUMBER:
                             137:222117
ENTRY DATE:
                             Entered STN: 13 Sep 2002
TITLE:
                             Compositions comprising bone marrow cells
                             together with demineralized and/or
                             mineralized bone matrix for the
                             induction of bone and cartilage formation
                             Slavin, Shimon; Gurevitch, Olga; Kurkalli, Basan Gowda
INVENTOR(S):
                             S.; Prigozhina, Tatyana
                             Hadasit Medical Research Services and Development
PATENT ASSIGNEE(S):
                             Ltd., Israel
SOURCE:
                             PCT Int. Appl., 55 pp.
                             CODEN: PIXXD2
DOCUMENT TYPE:
                             Patent
                             English
LANGUAGE:
INT. PATENT CLASSIF.:
              MAIN:
                             A61L
CLASSIFICATION:
                             63-7 (Pharmaceuticals)
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:
                                                   APPLICATION NO.
      PATENT NO.
                            KIND
                                     DATE
                                                                               DATE
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                             ----
                                     -----
                                                   -----
                                   20020912
20040219
     WO 2002070023 A2
WO 2002070023 A3
                                                   WO 2002-IL172
                                                                               20020305
      WO 2002070023
                             A3
              AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
               CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
               TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
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20040428 EP 2002-701530

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

EP 1411994

A2

(Preparation); RACT (Reactant or reagent)

US 2004170610 PRIORITY APPLN. INFO.: A1 20040902 US 2004-471031

20040419 LL 2001-141813 A 20010305

WO 2002-IL172

W 20020305

PATENT CLASSIFICATION CODES:

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 2002070023 ICM A61L

ABSTRACT:

A composition comprises bone marrow cells (BMC) and demineralized bone matrix (DBM) and/or mineralized bone matrix (MBM) and optionally comprising bone morphogenetic protein/s (BMP) and/or other active agents, particularly for use in the transplantation of mesenchymal progenitor cells into a joint and/or a cranio-facial-maxillary bone, for restoring and/or enhancing the formation of a new hyaline cartilage and subchondral bone structure. The composition of the invention and method of treatment employing the same may be used for the treatment of hereditary or acquired bone disorders, hereditary or acquired cartilage disorders, malignant bone or cartilage disorders, metabolic bone diseases, bone infections, conditions involving bone or cartilage deformities and Paget's disease. The composition and method may further be used for the correction of complex fractures, bone replacement and formation of new bone in plastic or sexual surgery, for support of implants of joints, cranio-facial-maxillary bones, or other musculoskeletal implants, including artificial implants. The method of the invention may further be used for treating damaged joints or degenerative arthropathy associated with malformation and/or dysfunction of cartilage and/or subchondral bone. A kit is provided for performing transplantation into a joint or a cranio-facial-maxillary bone of a

SUPPL. TERM:

bone marrow cell bone cartilage formation

INDEX TERM:

Bone, disease

(Paget's; compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for the

induction of bone and cartilage formation)

INDEX TERM:

Bone

mammal of the composition of the invention.

Bone marrow Cartilage Human

Immunomodulators Immunosuppressants

Transplant and Transplantation

(compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for the

induction of bone and cartilage formation)

INDEX TERM:

Bone morphogenetic proteins

ROLE: THU (Therapeutic use); BIOL (Biological study); USES

(Uses)

(compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for the

induction of bone and cartilage formation)

INDEX TERM:

Prosthetic materials and Prosthetics (implants; compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for the

induction of bone and cartilage formation) Mesenchyme

INDEX TERM:

(stem cell; compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for the induction of bone and cartilage formation)

ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN L6

ACCESSION NUMBER:

2002:695798 CAPLUS

DOCUMENT NUMBER:

137:237783

ENTRY DATE:

Entered STN: . 13 Sep 2002

TITLE:

Compositions comprising bone marrow cells

together with demineralized and/or mineralized bone matrix for bone

marrow transplantation

INVENTOR(S): Slavin, Shimon; Gurevitch, Olga; Kurkalli, Basan Gowda

S.; Prigozhina, Tatyana

PATENT ASSIGNEE(S): Hadasit Medical Research Services and Development

Ltd., Israel

SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE: Patent English

INT. PATENT CLASSIF.:

MAIN:

A61K035-00

CLASSIFICATION:

63-7 (Pharmaceuticals)

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA	PATENT NO.					KIND DATE		APPLICATION NO.						DATE			
WO	2002	06998	88						WO 2002-IL171					20020305			
WO	2002	06998	88		A3		2004	0226									
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		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
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		тJ,	•	•	•	•	·	·	•		•	•		•	•	•	•
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
																TD,	
EP	1418	926	·		A2	·	2004	0519	· ·	EP 2	002-	7015	29		2	0020	305
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						
JP	2004	5259	09	•	T2		2004	0826		JP 2	002-	5691	63		2	0020	305
US	2004	15683	34		A1		2004	0812	1	US 2	004-	4710	48		2	0040	331
PRIORIT	Y APP	LN.	INFO	. :						IL 2	001-	1418	13	i	A 2	0010	305
									1	WO 2	002-	IL17	1	1	₩ 2	0020	305
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PATENT CLASSIFICATION CODES:

WO 2002069988 ICM A61K035-00 JP 2004525909 FTERM 4C084/AA02; 4C084/AA03; 4C084/BA01; 4C084/CA18; 4C084/DB60; 4C084/MA02; 4C084/MA23; 4C084/MA65; 4C084/NA14; 4C084/ZA552; 4C084/ZA962; 4C084/ZB212; 4C084/ZB262; 4C087/AA01; 4C087/AA02; 4C087/AA03; 4C087/BB44; 4C087/BB46; 4C087/BB64; 4C087/CA04; 4C087/CA06; 4C087/MA02; 4C087/MA23; 4C087/MA65; 4C087/NA14; 4C087/ZA55; 4C087/ZA96; 4C087/ZB21;	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
			4C084/AA02; 4C084/AA03; 4C084/BA01; 4C084/CA18; 4C084/DB60; 4C084/MA02; 4C084/MA23; 4C084/MA65; 4C084/NA14; 4C084/ZA552; 4C084/ZA962; 4C084/ZB212; 4C084/ZB262; 4C087/AA01; 4C087/AA02; 4C087/AA03; 4C087/BB44; 4C087/BB46; 4C087/BB64; 4C087/CA04; 4C087/CA06; 4C087/MA02; 4C087/MA23; 4C087/MA65;

ABSTRACT:

A composition comprising bone marrow cells (BMC) and demineralized bone matrix (DBM) and/or mineralized bone matrix (MBM), optionally comprising bone morphogenetic protein (BMP), particularly for use in bone marrow transplantation, into bone marrow cavity or into extraskeletal sites, and methods of transplantation/implantation thereof. The composition and methods of the invention enable restoring and/or enhancing the formation of hematopoietic microenvironment originating from the transplanted BMC, and are useful in the treatment of hematopoietic disorders, such as deficiency of stem cells and/or their products, genetic conditions resulting in abnormal stem cells and/or products, or hematopoietic disorders of malignant or non-malignant origin. The composition and method of the invention may also be used for the induction of graft tolerance, for the prevention of graft-v.-host disease. It is mostly important that the compns. and methods of the invention may be applied for the treatment of diseases affecting primarily or secondarily the stromal microenvironment that supports and regulates hematopoiesis. Further provided is a kit for transplantation into a mammal of BMC in admixt. with DBM and/or MBM.

SUPPL. TERM: bone marrow cell transplant; demineralized mineralized bone

transplant

INDEX TERM: Transplant and Transplantation

(bone; compns. comprising bone marrow cells together with

demineralized and/or mineralized bone matrix for bone

marrow transplantation)

INDEX TERM: Bone

Bone marrow

(compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for bone

marrow transplantation)

INDEX TERM: Bone morphogenetic proteins

ROLE: THU (Therapeutic use); BIOL (Biological study); USES

(Uses)

(compns. comprising bone marrow cells together with demineralized and/or mineralized bone matrix for bone

marrow transplantation)

INDEX TERM: Hematopoiesis

(disorders; compns. comprising bone marrow cells together with demineralized and/or mineralized hope matrix for

with demineralized and/or mineralized bone matrix for

bone marrow transplantation)

INDEX TERM: Abdomen

Kidney Liver Muscle

(extraskeletal site; compns. comprising bone marrow cells

together with demineralized and/or mineralized bone

matrix for bone marrow transplantation)

INDEX TERM: Bone

(transplant; compns. comprising bone marrow cells together with demineralized and/or mineralized bone

matrix for bone marrow transplantation)

L6 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1995:965987 CAPLUS

DOCUMENT NUMBER: 124:26528

ENTRY DATE: Entered STN: 06 Dec 1995
TITLE: Demineralized bone matrix

as a template for mineral-organic composites

AUTHOR(S): Walsh, W. R.; Christiansen, D. L.

CORPORATE SOURCE: Dep. of Orthopaedics, Brown Univ. Sch. of Medicine,

Providence, RI, USA

SOURCE: Biomaterials (1995), 16(18), 1363-71

ultrastructural evaluations are carried out for characterization.

CODEN: BIMADU; ISSN: 0142-9612

PUBLISHER: Elsevier DOCUMENT TYPE: Journal

LANGUAGE: English

CLASSIFICATION: 13-6 (Mammalian Biochemistry)

ABSTRACT:

Mineralizing biol. tissues are complex bioceramic-biopolymer composites engineered for a variety of functions. The organic and inorg. constituents, morphol., location, orientation, crystallinity and interactions exhibit materials of extremely fine microstructure, unique mech. and phys. properties with high strength and fracture toughness compared to the individual constituents. An understanding of mineralization, ultrastructural organization and interfacial bonding forces in mineralizing biol. composite tissues, such as bone, may provide new strategies and techniques for the production of a novel class of man-made organic-ceramic composites. The present study explores the use of the organic matrix remaining after removal of the mineral phase by chelation with EDTA or solubilizing in HCl as a template for mineral deposition and the production of mineral-organic composites. Different pH conditions are employed to alter the inorg. phase which is deposited within the organic matrix. Mech. testing and

SUPPL. TERM:

demineralized bone matrix mineral org composite

INDEX TERM:

(demineralized bone matrix as template for mineral-organic

composites)

INDEX TERM:

1306-06-5, Hydroxyapatite 10103-46-5, Calcium phosphate

14567-92-1, Brushite

ROLE: BSU (Biological study, unclassified); MFM (Metabolic

formation); BIOL (Biological study); FORM (Formation,

nonpreparative)

(demineralized bone matrix as template for mineral-organic

composites)

1.6 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1994:226978 CAPLUS

DOCUMENT NUMBER:

120:226978

ENTRY DATE:

Entered STN: 30 Apr 1994

TITLE:

Composition and methods for the generation

of bone using demineralized bone

matrix and transforming growth factor-β

INVENTOR(S):

Bruce, A. Gregory; Strong, D. Michael; Kibblewhite, Douglas J.; Gombotz, Wayne R.; Larrabee, Wayne F.;

Purchio, Anthony F.

PATENT ASSIGNEE(S):

Bristol-Myers Squibb Co., USA

SOURCE:

Eur. Pat. Appl., 19 pp.

DOCUMENT TYPE:

CODEN: EPXXDW

Patent

LANGUAGE:

English

INT. PATENT CLASSIF.:

MATN:

A61K035-32

SECONDARY:

A61K037-02; A61L027-00 63-6 (Pharmaceuticals)

CLASSIFICATION:

Section cross-reference(s): 1

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 585168	A2	19940302	EP 1993-402073	19930818
EP 585168	A3	19940817 .		
R: AT, BE, CH,	DE, DK	, ES, FR, GB	, GR, IE, IT, LI, LU,	MC, NL, PT, SE
CA 2103943	AA	19940222	CA 1993-2103943	19930812
NO 9302912	Α	19940222	NO 1993-2912	19930817
AU 9344680	A1	19940224	AU 1993-44680	19930818
JP 06157339	A2 .	19940603	JP 1993-207328	19930823
PRIORITY APPLN. INFO.:			US 1992-933290	19920821
DAMPAR OF ACCIDIOANTON COL	DEC.			

PATENT CLASSIFICATION CODES:

ICS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 585168	ICM	A61K035-32

A61K037-02; A61L027-00

ABSTRACT:

Compns. and methods utilizing TGF- β and demineralized bone matrix (DBM) are described that are capable of inducing the formation of useful, nonresorptive bone. Bone formation is stimulated by the synergistic activity of a TGF- β mol., such as TGF- β 1 or TGF- 5β , with a HCl-treated DBM. Normal, hard nonresorptive bone development is stimulated and can be utilized in the treatment of fractures, skeletal defects, surgical repairs and skeletal reconstructions, such as in maxillofacial reconstructions. Implants were prepared from HCl-treated DBM and TGF- β 1 and placed in rabbits. TGF-1 β , at 100 and 250 $\mu g/g$ DBM, significantly enhanced bone formation.

SUPPL. TERM:

nonresorptive bone growth TGF beta; demineralized bone matrix TGF beta implant; transforming growth factor beta

bone repair

INDEX TERM:

Plastics

ROLE: BIOL (Biological study)

(malleable osteogenic, containing demineralized bone matrix

and transforming growth factor- β for stimulating

nonresorptive bone growth)

INDEX TERM: Bone, metabolism

(nonresorptive growth of, stimulation of, with demineralized bone matrix and transforming growth

factor-β)

INDEX TERM: Bone, neoplasm

(repair of lesions from, with demineralized bone matrix

and transforming growth factor- β , nonresorptive bone

growth stimulation in)

INDEX TERM: Bone, disease

(cyst, repair of lesions from, with demineralized bone

matrix and transforming growth factor- β , nonresorptive bone growth stimulation in)

INDEX TERM: Bone, disease

(fracture, repair of, with demineralized bone matrix and

transforming growth factor-β, nonresorptive bone

growth stimulation in)

INDEX TERM: Dental materials and appliances

Prosthetic materials and Prosthetics

(implants, demineralized bone matrix and transforming

growth factor- β in, for stimulating nonresorptive

bone growth)

INDEX TERM: Animal growth regulators

ROLE: BIOL (Biological study)

(β-transforming growth factors, nonresorptive bone

growth stimulation with demineralized bone matrix and)

INDEX TERM: Animal growth regulators

ROLE: BIOL (Biological study)

(β1-transforming growth factors, nonresorptive bone

growth stimulation with demineralized bone matrix and)

INDEX TERM: Animal growth regulators

ROLE: BIOL (Biological study)

(β5-transforming growth factors, nonresorptive bone growth stimulation with demineralized bone matrix and)

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	ENTRY	SESSION
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
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NEWS	4	AUG	02	IFIPAT/IFIUDB/IFICDB reloaded with new search and display
				fields
NEWS	5	AUG	02	CAplus and CA patent records enhanced with European and Japan
				Patent Office Classifications
NEWS	6	AUG	02	The Analysis Edition of STN Express with Discover!
				(Version 7.01 for Windows) now available
NEWS	7	AUG	27	BIOCOMMERCE: Changes and enhancements to content coverage
NEWS	8	AUG	27	BIOTECHABS/BIOTECHDS: Two new display fields added for legal
				status data from INPADOC
NEWS	9	SEP	01	INPADOC: New family current-awareness alert (SDI) available
NEWS	10	SEP	01	New pricing for the Save Answers for SciFinder Wizard within
				STN Express with Discover!
NEWS	11			New display format, HITSTR, available in WPIDS/WPINDEX/WPIX
NEWS	12			STN Patent Forum to be held October 13, 2004, in Iselin, NJ
NEWS		SEP	27	STANDARDS will no longer be available on STN
NEWS	14	SEP	27	SWETSCAN will no longer be available on STN
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NEWS	EXP.	RESS		GY 30 CURRENT WINDOWS VERSION IS V7.01, CURRENT
				CINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
				CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004
NEWS				N Operating Hours Plus Help Desk Availability
NEWS				neral Internet Information
NEWS				lcome Banner and News Items
NEWS				rect Dial and Telecommunication Network Access to STN
NEWS	WWW		CAS	S World Wide Web Site (general information)
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=> index bioscience FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED COST IN U.S. DOLLARS

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FULL ESTIMATED COST

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Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0* with SET DETAIL OFF.

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 - 9 FILE BIOSIS
 - 3 FILE BIOTECHABS
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 - 22 FILE CAPLUS
 - 23 FILES SEARCHED...
 - 1 FILE DISSABS
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 - 33 FILE IFIPAT
 - 1 FILE JICST-EPLUS
 - 3 FILE LIFESCI
 - 13 FILE MEDLINE
 - 5 FILE PASCAL
 - 1 FILE PROMT
 - 63 FILES SEARCHED...
 - 13 FILE SCISEARCH
 - 2 FILE TOXCENTER
 - 415 FILE USPATFULL
 - 27 FILE USPAT2
 - 24 FILE WPIDS
 - 24 FILE WPINDEX
 - 24 FILES HAVE ONE OR MORE ANSWERS, 74 FILES SEARCHED IN STNINDEX
- L1 QUE COMPOSIT? AND DEMINERALIZ? BONE MATRI? AND COLLAGEN

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F3			27	USPAT2
F4			24	WPIDS
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F6			22	CAPLUS
F7			13	MEDLINE
F8			13	SCISEARCH
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FILE 'IFIPAT' ENTERED AT 09:48:16 ON 07 OCT 2004 COPYRIGHT (C) 2004 IFI CLAIMS(R) Patent Services (IFI)

FILE 'USPAT2' ENTERED AT 09:48:16 ON 07 OCT 2004 CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

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     2004:414651 CAPLUS
AN
DN
     140:395593
TI
     Cohesive demineralized bone compositions
     Rosenberg, Aron D.; Gilles de Pelichy, Laurent
IN
     Etex Corporation, USA
PA
     U.S. Pat. Appl. Publ., 15 pp.
SO
     CODEN: USXXCO
DT
     Patent
     English
LA
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             GW, ML, MR, NE, SN, TD, TG
PRAI US 2002-298112
                          Α
                                 20021115
     Demineralized bone matrix fibers and a
     demineralized bone matrix compn. are
     provided for bone repair. The demineralized bone
     matrix fibers have an average fiber length in the range from about 250
     µm to about 2 mm and an aspect ratio of greater than about 4. The
     demineralized bone matrix compn.
     includes demineralized bone matrix fibers
     and a biocompatible liquid in an amount to produce a coherent, formable mass.
     The formable mass retains its cohesiveness when immersed in a liquid
     Methods for making the demineralized bone
     matrix fibers and compn. are also provided.
     ANSWER 2 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
L6
AN
     2003:300930 CAPLUS
     138:309229
DN
ΤI
     Improved bone graft
     Knaack, David; Traianedes, Kathy; Diegman, Michele; Forsyth, Nanette;
IN
     Winterbottom, John
PA
     Osteotech, Inc., USA
SO
     PCT Int. Appl., 87 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
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     PATENT NO.
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                                                                     20021015
     WO 2003030956
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     EP 1434608
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PRAI US 2001-329156P
                          P
                                20011012
                          Р
    US 2002-392462P
                                20020627
    WO 2002-US32941
                          W
                                20021015
AB
    An improved demineralized bone matrix (DBM)
    or other matrix compn. is provided that has been mixed with a
     stabilizing agent that acts as (1) a diffusion barrier, (2) a enzyme
     inhibitor, (3) a competitive substrate, or (4) a masking moiety. A
    diffusion barrier acts as a barrier so as to protect the osteoinductive
     factors found in DBM from being degraded by proteolytic and glycolytic
     enzymes at the implantation site. Stabilizing agents may be any
    biodegradable material such as starches, modified starches, cellulose,
    dextran, polymers, proteins, and collagen. As the stabilizing
     agents degrades or dissolves in vivo, the osteoinductive factors such as
    TGF-\beta, BMP, and IGF are activated or exposed, and the activated
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inventive improved osteoinductive matrix compns.

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, AQUALINE, ANABSTR, ANTE, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS, DDFB, DDFU, DGENE, ...' ENTERED AT 09:37:28 ON 07 OCT 2004

factors work to recruit cells from the perivascular space to the site of

injury and to cause differentiation into bone-forming cells. The invention also provides methods of preparing, testing, and using the

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SEA COMPOSIT? AND DEMINERALIZ? BONE MATRI? AND COLLAGEN

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     FILE BIOTECHDS
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     FILE BIOTECHNO
     FILE CANCERLIT
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     FILE CAPLUS
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     FILE DISSABS
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L10
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L16
AN
     1996:455578 CAPLUS
DN
     125:151095
     Entered STN: 01 Aug 1996
ED
     Comparative histological study of mineralizations after intramuscular
ΤI
     implantations of heat-denatured demineralized bone
    matrix gelatin, heat-denatured demineralized tooth, and
     cross-linked collagen
ΑU
     Ninomiya, Masami
     Sch. Dent., Univ. Tokushima, Tokushima, 770, Japan
CS
     Shikoku Shigakkai Zasshi (1996), 9(1), 77-97
SO
     CODEN: SSZAED; ISSN: 0914-6091
PB
     Shikoku Shigakkai
DT
     Journal
     Japanese
LA
     63-7 (Pharmaceuticals)
CC
     I.m. implantation of demineralized bone matrix
AB
     gelatin (BMG) is known to form spherical mineralized deposits in the
     implant prior to bone tissue formation induced by bone morphogenetic
     protein (BMP). This type of mineralization is called "acellular mineral
     deposition (AMD)", which is not associated with osteogenic cells. In the
     present study, heat-denatured BMG, heat-denatured demineralized tooth, and
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calf skin type I collagen cross-linked with glutaraldehyde were resp. implanted into the rectus abdominis muscles in rats. Then mineralized deposits formed in the implants after the resp. implantations were compared by means of histol. anal.by using light and electron microscopes. Compns. of these deposits were also analyzed by electron probe x-ray microanal. Heat-denatured BMG, which was prepared at 150° for 30 min to inactivate non-collagenous proteins including BMP (NCP), was used to investigate whether NCP had some roles in AMD process. Heat-denatured demineralized tooth and crosslinked collagen were also used to examine the relations of AMD with calcification of dentin and with matrix collagen. In heat-denatured BMG, spherical mineralized deposits initially appeared at day 3 and then gradually increased in the size and the number Finally these deposits fused with each other to occupy the whole implant at day 14. Similar observations were obtained in the case of heat-denatured demineralized tooth implant. Mineralization was progressed in one way from enamel side to dental pulp side. Predentin area did not easily mineralized during the exptl. period. In crosslinked collagen, fiber-like mineralized deposits were scattered along collagen fiber bundles at day 3. These deposits gradually increased in the number and invaded into the surrounding collagen fibers to increase in the size, and then these deposits fused with each other to occupy the whole implant at day 14. Bone and cartilaginous tissues did not appear around the implants, and also there were no osteoblast- and osteoclast-like cells in any implants. Mineralized deposits were formed compactly showing needle-shaped crystals in all implants. Compn. anal. revealed that these deposits showed a similar mol. ratio of calcium to phosphorus. AMD occurs with no relation to the subsequent bone tissue formation and that NCP never have any roles in AMD process. AMD physicochem. occurs depending on cross-linked collagen of matrix and that AMD observed in the implanted dentin may take place in the physiol. mineralization because of the morphol. similarity between AMD and globular histol mineralization implant bone gelatin; tooth histol mineralization bone; collagen histol mineralization implant Bone Toot h (histol. study of mineralizations after i.m. implantations of bone matrix gelatin and and collagen) Gelatins, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (histol. study of mineralizations after i.m. implantations of bone matrix gelatin and and collagen)

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matrix gelatin and and collagen)

IT Dental materials and appliances
Prosthetic materials and Prosthetics
(implants, histol. study of mineralizations after i.m. implantations of bone matrix gelatin and and collagen)

IT Collagens, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
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(reaction products, histol. study of mineralizations after i.m. implantations of bone matrix gelatin and and collagen)

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² FILE BIOENG

⁹ FILE BIOSIS

³ FILE BIOTECHABS

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E40 1 AU9924727/PN			
E41 1 EP1051205/PN			
			JP2002501786/PN
· .			US2002018796/PN
			US2002076429/PN
E45 1 WO9938543/PN	E45	1	WQ9938543/PN

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(FILE 'HOME' ENTERED AT 09:33:48 ON 07 OCT 2004)

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SET ABBR ON PERM

SEA COMPOSIT? AND DEMINERALIZ? BONE MATRI? AND COLLAGEN

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² FILE BIOENG

⁹ FILE BIOSIS

³ FILE BIOTECHABS

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                   FILE TOXCENTER
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                   FILE USPATFULL
              27
                   FILE USPAT2
                  FILE WPIDS
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             33 FILE IFIPAT
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              O FILE SCISEARCH
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              O FILE BIOSIS
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L23
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              O FILE USPAT2
L24
L25
              1 FILE WPIDS
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              O FILE BIOSIS
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                SEL L22 PN
                SEL L25 PN
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FILE BIOTECHDS

L25 ANSWER 1 OF 1 WPIDS COPYRIGHT 2004 THE THOMSON CORP on STN

ACCESSION NUMBER: 1999-518296 [43] WPIDS

US 2002018796 A1 20020214 (200214) US 2002076429 A1 20020620 (200244)

DOC. NO. NON-CPI: N1999-385472 DOC. NO. CPI: C1999-151269

TITLE: Implantable bone paste composition useful for

implantation in e.g. non-union fractures, periodontal

ridge augmentation and craniofacial surgery.

DERWENT CLASS: All A96 B07 D22 P34

INVENTOR(S): FELTON, P A; JAW, R; WIRONEN, J F

PATENT ASSIGNEE(S): (REGE-N) REGENERATION TECHNOLOGIES INC; (UYFL-N) UNIV

FLORIDA TISSUE BANK INC; (REGE-N) REGENERATION

TECHNOLOGIES; (WIRO-I) WIRONEN J F; (FELT-I) FELTON P A;

(JAWR-I) JAW R

COUNTRY COUNT: 85

PATENT INFORMATION:

PAT	CENT	NO			KII	ND I	DATI	Ξ	1	WEE	K		LA	I	PG								
WO	993	3543	<i>-</i> 3		A2	199	9908	305	(19	9994	13)	* El	· 1	37	- <								
	RW:	AT	BE	CH	CY	DE	DK	EΑ	ES	FI	FR	GB	GH	GM	GR	ΙE	IT	KE	LS	LU	MC	MW	NL
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AU	9924	172	7		Α	199	908	316	(20	000	02)			•	<								
EP	105	1205	5		A2	200	011	115	(20	900	59)	El	V	<	<								
	R:	ΑT	ΒE	CH	CY	DE	DK	ES	FI	FR	GB	GR	ΙE	IT	LI	LU	MC	NL-	PT	SE			
JP	2002	250	1786	5	W	200	201	122	(20	002	11)			43									

APPLICATION DETAILS:

PATENT NO	KIND .	APPLICATION	DATE
WO 9938543	A2	WO 1999-US1677	19990127
AU 9924727	A	AU 1999-24727	19990127
EP 1051205	A2	EP 1999-904302	19990127
		WO 1999-US1677	19990127
JP 2002501786	W	WO 1999-US1677	19990127
		JP 2000-529274	19990127
US 2002018796	A1	US 1998-14519	19980128
US 2002076429	A1 CIP of	US 1998-14519	19980128
		US 1998-154400	19980916

FILING DETAILS:

PATENT NO K	KIND	PATENT NO
EP 1051205 A	A Based on A2 Based on V Based on	WO 9938543 WO 9938543 WO 9938543

PRIORITY APPLN. INFO: US 1998-154400 19980916; US 1998-14519 19980128

AN 1999-518296 [43] WPIDS AB WO 9938543 A UPAB: 19991020

NOVELTY - An implantable bone paste **composition** comprising thermally sterilized gelatin as a carrier is used in a recipient as substantially bioabsorbable osteogenic component.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:

(1) a method for inducing bone formation in vivo in a recipient comprising implanting the novel **composition**;

- (2) a method for making an implantable graft comprising making the novel **composition** and molding the graft from it;
- (3) a method for enhancing osteoconductivity, osteoinductivity or ossesointegration of an implant comprising coating the implant with the novel composition;
 - (4) implants coated with the novel composition.
- USE The **composition** is useful for implantation in non-union fractures, periodontal ridge augmentation, craniofacial surgery, arthrodesis of spinal or other joints, spinal fusion procedures and implant fixation (claimed).

 Dwg.0/3

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(FILE 'HOME' ENTERED AT 09:33:48 ON 07 OCT 2004)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, AQUALINE, ANABSTR, ANTE, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS, DDFB, DDFU, DGENE, ...' ENTERED AT 09:37:28 ON 07 OCT 2004

SET PLURALS ON PERM

FILE USPATFULL

FILE USPAT2

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    FILE BIOENG
9
    FILE BIOSIS
3
    FILE BIOTECHABS
3
    FILE BIOTECHDS
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    FILE BIOTECHNO
1
   FILE CANCERLIT
22
    FILE CAPLUS
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   FILE EMBAL
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   FILE ESBIOBASE
33
   FILE IFIPAT
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    FILE JICST-EPLUS
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    FILE LIFESCI
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   FILE MEDLINE
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   FILE PASCAL
   FILE PROMT
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13
   FILE SCISEARCH
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    FILE TOXCENTER
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24 FILE WPIDS
24 FILE WPINDEX
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FILE 'USPATFULL, IFIPAT, USPAT2, WPIDS, CAPLUS, MEDLINE, SCISEARCH, EMBASE, BIOSIS' ENTERED AT 09:48:16 ON 07 OCT 2004

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             27 FILE USPAT2
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             11 FILE EMBASE
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             9 FILE BIOSIS
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415

L1

27

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567 S L1
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           172 FILE USPATFULL
L13
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            41 S L21 AND PY<2001
L31
               SEL L22 PN
               SEL L25 PN
=> d L22 1-10 ibib,abs
L22 ANSWER 1 OF 39 USPATFULL on STN
                       2000:128306 USPATFULL
ACCESSION NUMBER:
                       Chitin hydrogels, methods of their production and use
TITLE:
                       Drohan, William N., Springfield, VA, United States
INVENTOR(S):
                       MacPhee, Martin J., Gaithersburg, MD, United States
                       Miekka, Shirley I., Gaithersburg, MD, United States
                       Singh, Manish S., Columbia, MD, United States
                       Elson, Clive, Halifax, Canada
                       Taylor, Jr., John R., New York, NY, United States
PATENT ASSIGNEE(S):
                       Chitogenics, Inc., Morristown, NJ, United States (U.S.
                       corporation)
                       The American National Red Cross, Washington, DC, United
                       States (U.S. corporation)
                       Coalition for Hemophilia B, New York, NY, United States
                       (U.S. corporation)
                          NUMBER KIND DATE
                       _____
                      US 6124273
US 1997-960555
PATENT INFORMATION:
                                              20000926
                                            19971013 (8)
APPLICATION INFO.:
RELATED APPLN. INFO.:
                       Continuation of Ser. No. US 1996-659999, filed on 7 Jun
                       1996, now abandoned
                                      DATE
                            NUMBER
                       -----
PRIORITY INFORMATION:
                      US 1995-109P 19950609 (60)
DOCUMENT TYPE:
                       Utility
FILE SEGMENT:
                       Granted
PRIMARY EXAMINER:
                      Fonda, Kathleen K.
LEGAL REPRESENTATIVE:
                      Lahive & Cockfield, LLP
                       32
NUMBER OF CLAIMS:
EXEMPLARY CLAIM:
NUMBER OF DRAWINGS:
                       6 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT:
                      2441
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TOTAL FOR ALL FILES

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention is directed to the preparation and utilization of supplemented chitin hydrogels, such as chitosan hydrogels. Further provided are biomaterials comprising same. The particular supplement delivered by the chitin hydrogel is selected as a function of its intended use. In one embodiment, this invention provides a composition of matter, comprising a chitin hydrogel or chitin-derived hydrogel, wherein the hydrogel does not inhibit full-thickness skin wound healing.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 2 OF 39 USPATFULL on STN

ACCESSION NUMBER: 2000:121069 USPATFULL

TITLE: Supplemented and unsupplemented tissue sealants, method

of their production and use

INVENTOR(S): MacPhee, Martin James, Gaithersburg, MD, United States

Drohan, William Nash, Springfield, VA, United States

Liau, Gene, Darnestown, MD, United States

Haudenschild, Christian, Rockville, MD, United States

The American National Red Cross, Falls Church, VA, PATENT ASSIGNEE(S):

United States (U.S. corporation)

KIND DATE NUMBER

-----PATENT INFORMATION: 20000912

US 6117425 US 1995-474086 APPLICATION INFO.: 19950607 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-351006, filed

on 7 Dec 1994, now abandoned which is a

continuation-in-part of Ser. No. US 1994-328552, filed on 25 Oct 1994, now abandoned which is a continuation of Ser. No. US 1993-31164, filed on 12 Mar 1993, now abandoned which is a continuation-in-part of Ser. No. US 1990-618419, filed on 27 Nov 1990, now abandoned which is a continuation-in-part of Ser. No. US

<--

1991-798919, filed on 27 Nov 1991, now abandoned

DOCUMENT TYPE: Utility Granted FILE SEGMENT:

PRIMARY EXAMINER: Woodward, M Patrick

ASSISTANT EXAMINER: Zeman, Mary K

LEGAL REPRESENTATIVE: Sterne, Kessler Goldstein & Fox P.L.L.C.

NUMBER OF CLAIMS: 57 EXEMPLARY CLAIM: 1,2,3

NUMBER OF DRAWINGS: 53 Drawing Figure(s); 36 Drawing Page(s)

LINE COUNT: 4910

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention provides supplemented tissue sealants, methods for their production and use thereof. Disclosed are tissue sealants supplemented with at least one cytotoxin or cell proliferation inhibiting composition. The composition may be further supplemented with, for example, one or more antibodies, analgesics, anticoagulants, anti-inflammatory compounds, antimicrobial compositions, cytokines, drugs, growth factors, interferons, hormones, lipids, demineralized bone or bone morphogenetic proteins, cartilage inducing factors, oligonucleotides polymers, polysaccharides, polypeptides, protease inhibitors, vasoconstrictors or vasodilators, vitamins, minerals, stabilizers and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 3 OF 39 USPATFULL on STN

ACCESSION NUMBER: 2000:117704 USPATFULL

TITLE: Methods for inhibiting the advanced glycosylation of

proteins

Cerami, Anthony, New York, NY, United States INVENTOR(S):

Ulrich, Peter C., Old Tappan, NJ, United States Brownlee, Michael A., New York, NY, United States The Rockefeller University, New York, NY, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: APPLICATION INFO.:

PATENT ASSIGNEE(S):

20000905 US 6114323 19981217 (9) US 1998-215612

RELATED APPLN. INFO.:

Continuation of Ser. No. US 1997-784861, filed on 16 Jan 1997, now patented, Pat. No. US 5852009 which is a continuation-in-part of Ser. No. US 1995-487059, filed on 7 Jun 1995, now patented, Pat. No. US 5612332 which is a division of Ser. No. US 1994-274243, filed on 13 Jul 1994, now abandoned which is a division of Ser. No. US 1992-889141, filed on 27 May 1992, now patented, Pat. No. US 5356895 which is a division of Ser. No. US 1990-605654, filed on 30 Oct 1990, now patented, Pat. No. US 5140048 which is a continuation-in-part of Ser. No. US 1988-264930, filed on 2 Nov 1988, now patented, Pat. No. US 4983604 which is a continuation-in-part of Ser. No. US 1987-119958, filed on 13 Nov 1987, now

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patented, Pat. No. US 4908446 which is a

continuation-in-part of Ser. No. US 1985-798032, filed on 14 Nov 1985, now patented, Pat. No. US 4758583 which is a continuation-in-part of Ser. No. US 1984-590820, filed on 19 Mar 1984, now patented, Pat. No. US 4665192

Utility

DOCUMENT TYPE: FILE SEGMENT:

Granted

PRIMARY EXAMINER: LEGAL REPRESENTATIVE: Higel, Floyd D. Klauber & Jackson

NUMBER OF CLAIMS:

32

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

5 Drawing Figure(s); 5 Drawing Page(s)

LINE COUNT:

1181

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to methods for inhibiting protein aging. AB Accordingly, methods are disclosed for treating an animal to inhibit the formation of advanced glycosylation end products of target proteins with the animal by adminstering a pharmaceutical composition comprising an agent capable of reacting with the carbonyl moiety of the early glycosylation product, whereby the subsequent crosslinking of the early glycosylation product is inhibited. Agents of the present invention comprise aminoguanidine, its pharmaceutically acceptable salts, and mixtures thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 4 OF 39 USPATFULL on STN

ACCESSION NUMBER:

2000:74106 USPATFULL

TITLE:

Recombinant production of latent TGF-beta binding

protein-3 (LTBP-3)

INVENTOR(S):

Bonadio, Jeffrey, Ann Arbor, MI, United States

Yin, Wushan, Ann Arbor, MI, United States

PATENT ASSIGNEE(S):

The Regents of The University of Michigan, Ann Arbor,

MI, United States (U.S. corporation)

KIND DATE NUMBER _____

PATENT INFORMATION: APPLICATION INFO.:

US 6074840 20000613

US 1995-479722 19950607 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 1995-US2251, filed on 21 Feb 1995 which is a continuation-in-part of Ser. No. US 1994-316650, filed on 30 Sep 1994, now patented, Pat. No. US 5942496 which is a continuation-in-part of Ser. No. US 1994-199780, filed on 18 Feb 1994, now

patented, Pat. No. US 5763416

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Fitzgerald, David L. LEGAL REPRESENTATIVE: William, Morgan & Amerson

NUMBER OF CLAIMS: 43 EXEMPLARY CLAIM: 1,20

NUMBER OF DRAWINGS: 17 Drawing Figure(s); 8 Drawing Page(s)

LINE COUNT: 4758

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed are novel nucleic acid and peptide compositions AB comprising latent $TGF\beta$ binding proteins (LTBPs). Also disclosed are methods of using LTBP-2 and LTBP-3 peptides and the DNA segments which encode them.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 5 OF 39 USPATFULL on STN

ACCESSION NUMBER: 2000:50372 USPATFULL

TITLE: Supplemented and unsupplemented tissue sealants,

methods of their production and use

INVENTOR(S): MacPhee, Martin James, Gaithersburg, MD, United States

Drohan, William Nash, Springfield, VA, United States Woolverton, Christoper J., Kent, OH, United States

The American National Red Cross, Washington, DC, United PATENT ASSIGNEE(S):

States (U.S. government)

NUMBER KIND DATE -----

PATENT INFORMATION: US 6054122 20000425 <--19950607 (8) US 1995-479034

APPLICATION INFO.: Continuation-in-part of Ser. No. US 1994-351006, filed RELATED APPLN. INFO.:

on 7 Dec 1994, now abandoned which is a

continuation-in-part of Ser. No. US 1994-328552, filed on 25 Oct 1994, now abandoned which is a continuation of Ser. No. US 1993-31164, filed on 12 Mar 1993, now abandoned which is a continuation-in-part of Ser. No. US 1990-618419, filed on 27 Nov 1990, now abandoned And a continuation-in-part of Ser. No. US 1991-798919,

filed on 27 Nov 1991, now abandoned

DOCUMENT TYPE: Utility Granted FILE SEGMENT:

Smith, Lynette F. PRIMARY EXAMINER: Zeman, Mary K ASSISTANT EXAMINER:

Sterne, Kessler, Goldstein & Fox P.L.L.C. LEGAL REPRESENTATIVE:

NUMBER OF CLAIMS: 43 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 50 Drawing Figure(s); 36 Drawing Page(s)

4855 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention provides a fibrin sealant dressing, wherein said fibrin AB sealant may be supplemented with at least one composition selected from, for example, one or more regulatory compounds, antibody, antimicrobial compositions, analgesics, anticoagulants, antiproliferatives, anti-inflammatory compounds, cytokines, cytotoxins, drugs, growth factors, interferons, hormones, lipids, demineralized bone or bone morphogenetic proteins, cartilage inducing factors, oligonucleotides polymers, polysaccharides, polypeptides, protease inhibitors, vasoconstrictors or vasodilators, vitamins, minerals, stabilizers and the like. Also disclosed are methods of preparing and/or using the unsupplemented or supplemented fibrin sealant dressing.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 6 OF 39 USPATFULL on STN

ACCESSION NUMBER: 2000:44203 USPATFULL

TITLE: Compositions and therapeutic methods using

morphogenic proteins and stimulatory factors Lee, John C., San Antonio, TX, United States INVENTOR(S):

Yeh, Lee-Chuan C., San Antonio, TX, United States Stryker Corporation, Kalamazoo, MI, United States (U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE ----------

US 6048964 US 1995-570752 20000411 PATENT INFORMATION: <--

APPLICATION INFO.: 19951212 (8)

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Nutter, Nathan M.

LEGAL REPRESENTATIVE: Fish & Neave, Haley, Jr., James F., Ruskin, Barbara A.

NUMBER OF CLAIMS: 21 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 12 Drawing Figure(s); 12 Drawing Page(s)

3062 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides pharmaceutical compositions AB comprising a morphogenic protein stimulatory factor (MPSF) for improving the tissue inductive activity of morphogenic proteins, particularly those belonging to the BMP protein family. Methods for improving the tissue inductive activity of a morphogenic protein in a mammal using those compositions are provided. This invention also provides implantable morphogenic devices comprising a morphogenic protein and a MPSF disposed within a carrier, that are capable of inducing tissue formation in allogeneic and xenogeneic implants. Methods for inducing local tissue formation from a progenitor cell in a mammal using those devices are also provided. A method for accelerating allograft repair in a mammal using morphogenic devices is provided. This invention also provides a prosthetic device comprising a prosthesis coated with a morphogenic protein and a MPSF, and a method for promoting in vivo integration of an implantable prosthetic device to enhance the bond strength between the prosthesis and the existing target tissue at the joining site. Methods of treating tissue degenerative conditions in a mammal using the pharmaceutical compositions are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 7 OF 39 USPATFULL on STN

2000:21736 USPATFULL ACCESSION NUMBER:

Terminally sterilized osteogenic devices and TITLE:

preparation thereof

Tucker, Marjorie M., Holliston, MA, United States INVENTOR(S):

Rueger, David C., Southborough, MA, United States Sampath, Kuber T., Holliston, MA, United States

Stryker Corporation, Kalamazoo, MI, United States (U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE ______

US 6028242 US 1997-881307 20000222 -. PATENT INFORMATION:

APPLICATION INFO.: 19970624 (8)

Division of Ser. No. US 1995-478452, filed on 7 Jun RELATED APPLN. INFO.:

1995, now patented, Pat. No. US 5674292

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

Isabella, David J. PRIMARY EXAMINER:

ASSISTANT EXAMINER: Black, John M.

Testa, Hurwitz & Thibeault, LLP LEGAL REPRESENTATIVE:

NUMBER OF CLAIMS: 24 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)

LINE COUNT: 1416

Disclosed are terminally sterilized osteogenic devices for implantation into a mammal. The devices contain a combination of a biologically active osteogenic protein and an insoluble carrier which after being combined are sterilized by exposure to ionizing radiation, for example, by exposure to gamma rays or an electron beam. The terminally sterilized devices of the invention are characterized in that they induce bone formation following implantation into a mammal. Also disclosed is a method for inducing bone formation in a mammal by implanting a terminally sterilized device of the invention into a preselected locus in a mammal. Also disclosed is a method for preparing the terminally sterilized device of the invention.

L22 ANSWER 8 OF 39 USPATFULL on STN

2000:5017 USPATFULL ACCESSION NUMBER:

Terminally sterilized osteogenic devices and TITLE:

preparation thereof

Tucker, Marjorie M., Holliston, MA, United States INVENTOR (S):

Rueger, David C., Southborough, MA, United States Sampath, Kuber T., Holliston, MA, United States

Stryker Corporation, Hopkinton, MA, United States (U.S. PATENT ASSIGNEE(S):

corporation)

DATE NUMBER KIND _____

US 6013856 20000111 US 1998-159535 19980923 (9) PATENT INFORMATION:

APPLICATION INFO.:

Continuation of Ser. No. US 1997-881307, filed on 24 RELATED APPLN. INFO.:

Jun 1997 which is a division of Ser. No. US

1995-478452, filed on 7 Jun 1995, now patented, Pat.

No. US 5674292

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

Smith, Jeffrey A. PRIMARY EXAMINER: Robert, Eduardo C. ASSISTANT EXAMINER:

Testa, Hurwitz & Thibeault LLP LEGAL REPRESENTATIVE:

NUMBER OF CLAIMS: 34 EXEMPLARY CLAIM: 1.

1 Drawing Figure(s); 1 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 1444

Disclosed are terminally sterilized osteogenic devices for implantation AB into a mammal. The devices contain a combination of a biologically active osteogenic protein and an insoluble carrier which after being combined are sterilized by exposure to ionizing radiation, for example, by exposure to gamma rays or an electron beam. The terminally sterilized devices of the invention are characterized in that they induce bone formation following implantation into a mammal. Also disclosed is a method for inducing bone formation in a mammal by implanting a terminally sterilized device of the invention into a preselected locus in a mammal. Also disclosed is a method for preparing the terminally sterilized device of the invention.

L22 ANSWER 9 OF 39 USPATFULL on STN

ACCESSION NUMBER: 1999:117013 USPATFULL

Devices comprising chondrogenic protein and methods of TITLE:

inducing endochondral bone formation therewith

INVENTOR(S):

PATENT ASSIGNEE(S):

Oppermann, Hermann, Medway, MA, United States Ozkaynak, Engin, Milford, MA, United States Kuberasampath, Thangavel, Medway, MA, United States Rueger, David C., Hopkinton, MA, United States Pang, Roy H. L., Medway, MA, United States Stryker Biotech Corporation, Kalamazoo, MI, United States (U.S. corporation)

19990928

19950524 (8)

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NUMBER KIND DATE -----

US 5958441

PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.: US 1995-449699 Continuation of Ser. No. US 1993-147023, filed on 1 Nov 1993, now patented, Pat. No. US 5468845 which is a division of Ser. No. US 1992-841646, filed on 21 Feb 1992, now patented, Pat. No. US 5266683 which is a continuation-in-part of Ser. No. US 1992-827052, filed on 28 Jan 1992, now patented, Pat. No. US 5250302 Ser. No. Ser. No. US 1990-579865, filed on 7 Sep 1990, now patented, Pat. No. US 5108753 Ser. No. Ser. No. US 1990-621849, filed on 4 Dec 1990, now abandoned Ser. No. Ser. No. US 1992-995345, filed on 22 Dec 1992, now patented, Pat. No. US 5258494 Ser. No. Ser. No. US 1991-810560, filed on 20 Dec 1991, now abandoned Ser. No. Ser. No. US 1990-569920, filed on 20 Aug 1990, now abandoned Ser. No. Ser. No. US 1990-600024, filed on 18 Oct 1990, now abandoned Ser. No. Ser. No. US 1990-599543, filed on 18 Oct 1990, now abandoned Ser. No. Ser. No. US 1990-616374, filed on 21 Nov 1990, now patented, Pat. No. US 5162114 And Ser. No. US 1990-483913, filed on 22 Feb 1990, now patented, Pat. No. US 5171574 which is a continuation-in-part of Ser. No. US 1989-422613, filed on 17 Oct 1989, now patented, Pat. No. US 4975526 And Ser. No. US 1989-315342, filed on 23 Feb 1989, now patented, Pat. No. US 5011691, said Ser. No. US 827052 And Ser. No. US 579865 which is a division of Ser. No. US 1988-179406, filed on 8 Apr 1988, now patented, Pat. No. US 4968590 , said Ser. No. US 621849 which is a division of Ser. No. US 1988-232630, filed on 15 Aug 1988, now abandoned which is a continuation-in-part of Ser. No. US 179406 , said Ser. No. US 995345 which is a continuation of Ser. No. US 1990-621988, filed on 4 Dec 1990, now abandoned which is a division of Ser. No. US 1989-315342, filed on 23 Feb 1989, now patented, Pat. No. US 5011691 which is a continuation-in-part of Ser. No. US 232630 , said Ser. No. US 810560 which is a continuation of Ser. No. US 1991-660162, filed on 22 Feb 1991, now abandoned which is a continuation of Ser. No. US 1989-422699, filed on 17 Oct 1989, now abandoned which is a continuation-in-part of Ser. No. US 315342 , said Ser. No. US 569920 which is a continuation-in-part of Ser. No. US 422699 And Ser. No. US 483913 , said Ser. No. US 600024 And Ser. No. US 599543 which is a

continuation-in-part of Ser. No. US 569920 , said Ser. No. US 616374 which is a division of Ser. No. US 422613

DOCUMENT TYPE: FILE SEGMENT: PRIMARY EXAMINER: LEGAL REPRESENTATIVE: NUMBER OF CLAIMS: EXEMPLARY CLAIM: NUMBER OF DRAWINGS: LINE COUNT:

Kemmerer, Elizabeth C. Testa Hurwitz & Thibeault, LLP 19

1

Utility Granted

82 Drawing Figure(s); 49 Drawing Page(s) 5540

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Disclosed are (1) osteogenic devices comprising a matrix containing substantially pure natural-sourced mammalian osteogenic protein; (2) DNA and amino acid sequences for novel polypeptide chains useful as subunits of dimeric osteogenic proteins; (3) vectors carrying sequences encoding these novel polypeptide chains and host cells transfected with these vectors; (4) methods of producing these polypeptide chains using recombinant DNA technology; (5) antibodies specific for these novel polypeptide chains; (6) osteogenic devices comprising these recombinantly produced proteins in association with an appropriate carrier matrix; and (7) methods of using the osteogenic devices to mimic the natural course of endochondral bone formation in mammals.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 10 OF 39 USPATFULL on STN

ACCESSION NUMBER: 1999:106108 USPATFULL

TITLE: Compositions and therapeutic methods using

morphogenic proteins and stimulatory factors Lee, John C., San Antonio, TX, United States INVENTOR(S):

Yeh, Lee-Chuan C., San Antonio, TX, United States

PATENT ASSIGNEE(S): Stryker Corporation, Kalamazoo, MI, United States (U.S.

corporation)

NUMBER KIND DATE -----

US 5948428 19990907 PATENT INFORMATION: <---

US 1996-761468 APPLICATION INFO.: 19961206 (8)

Continuation-in-part of Ser. No. US 1995-570752, filed RELATED APPLN. INFO.:

on 12 Dec 1995

DOCUMENT TYPE: Utility Granted FILE SEGMENT: PRIMARY EXAMINER: Azpuru, Carlos

LEGAL REPRESENTATIVE: Fish & Neave, Haley, James F., Ruskin, Barbara A.

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

17 Drawing Figure(s); 16 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 3767

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides pharmaceutical compositions comprising a morphogenic protein stimulatory factor (MPSF) for improving the tissue inductive activity of morphogenic proteins, particularly those belonging to the BMP protein family. Methods for improving the tissue inductive activity of a morphogenic protein in a mammal using those compositions are provided. This invention also provides implantable morphogenic devices comprising a morphogenic protein and a MPSF disposed within a carrier, that are capable of inducing tissue formation in allogeneic and xenogeneic implants. Methods for inducing local tissue formation from a progenitor cell in a mammal using those devices are also provided. A method for accelerating allograft repair in a mammal using morphogenic devices is provided. This invention also provides a prosthetic device comprising a prosthesis coated with a morphogenic protein and a MPSF, and a method for promoting in vivo integration of an implantable prosthetic device to enhance the bond strength between the prosthesis and the existing target tissue at the joining site. Methods of treating tissue degenerative conditions in a mammal using the pharmaceutical compositions are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.